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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/522,372	01/18/2005	Christopher Paul Darby	ENL-346-A	1322
48980 7590 07/01/2008 YOUNG & BASILE, P.C. 3001 WEST BIG BEAVER ROAD SUITE 624 TROY, MI 48084				
EXAMINER				
VASUDEVA, AJAY				
ART UNIT		PAPER NUMBER		
3617				
NOTIFICATION DATE		DELIVERY MODE		
07/01/2008		ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

docketing@youngbasile.com

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Office Action Summary

Application No.

10/522,372

Applicant(s)

DARBY ET AL.

Examiner

Ajay Vasudeva

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 April 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-8,10 and 12-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 6-8 and 15 is/are allowed.
- 6) ☒ Claim(s) 1,3,4,10,12 and 13 is/are rejected.
- 7) ☒ Claim(s) 5 and 14 is/are objected to.
- 8) ☒ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/808)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 3, 4, 10, 12 and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by GB 449860 A ('860).

GB '860 shows an amphibious vehicle that is adapted for use in a land mode or in a marine mode. The vehicle has movable side flaps [18] that are considered to be the "trim tabs".

It is noted that the claims do not recite any specific structure of the "**trim tab**". In absence of any specific structural characterization, the limitation "**trim tab**" has been broadly interpreted to mean a "**tab for the purpose of trimming**", and includes any such component that is capable of adjusting the attitude/orientation of the vehicle about a transverse axis relative to its direction of motion. In the present case, the presence of the movable side flaps would influence the attitude/orientation of the amphibious vehicle when it is in a marine mode.

A control system is provided for controlling the trim tab, and includes a detecting means [29] that automatically actuates the tab by a telescoping or a rack-and-pinion actuation means [14] in response to a mode change event (see the abstract; page 2, lines 46-54; page 3, lines 126-130; page 4, lines 1-2). A first mode change event is indicative of a transition of the vehicle operation from a land mode into a marine mode, which causes the trim tabs to be moved into a deployed position. On the other hand, a second mode change event is indicative of a transition

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from the marine mode to the land mode, which causes the trim tabs to be moved into a retracted position.

Re claims 4 and 13, Applicant may note that if the vehicle, while still in a marine mode, were made to move in a reverse direction (i.e., a reverse propulsion) at substantially high speed, the detecting means would experience a substantial resistance by water that would force it to move in a downwardly direction. Because the detecting means is mechanically connected to the trim tab, any downwardly movement of the detecting means would cause the trim tabs to retract despite being in the marine mode. Therefore, the detecting means are considered capable of detecting selection of reverse propulsion in a marine mode, and the control system is considered capable of -- and therefore adapted to -- automatically move the at least one trim tab into the retracted position on detection of the selection of reverse propulsion.

Re claims 10 and 12, the recited steps are inherent in the operation of the vehicle when it moves between the land and marine modes.

Allowable Subject Matter

3. Claims 5 and 14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

4. Claims 6-8 and 15 are allowed.

Response to Arguments

5. Applicant's arguments with respect to claims 1, 3, 4, 10, 12 and 13 have been considered but are not persuasive.

Applicant's arguments: Applicant has stated that trim tabs are used for controlling a pitch of a watercraft, and has argued that the side flaps in GB '860 lack the position or orientation to control the pitch of the craft about a pitch axis.

Response: The side flaps of GB '860 are attached at the rear portion of the vehicle, and are capable of lifting the rear portion when they are in an extended position. Such lifting of the rear portion would cause the vehicle to rotate about a transverse axis to pitch the vehicle forwardly to a nose/bow down position. The lowering of the nose/bow of the vehicle is nothing but a forward pitching.

Applicant's arguments: Applicant has asserted that a "trim tab" is defined as a moveable plate mounted under the transom. Because the side flaps in GB '860 are not mounted under the transom, they cannot be considered as trim tabs.

Response: Applicant's definition is unacceptable for being too narrow in scope. As explained previously, the side flaps are capable of influencing the nose/bow attitude of the vehicle, and therefore have been broadly interpreted as being "trim tabs"

Applicant's arguments: Applicant has argued that the side flaps of GB '860 are capable only of lateral movement, and that too in unison, and therefore they cannot have any effect on either trim or steering of the vehicle.

Response: The lateral movement of the side flaps, whether or not in unison, is capable of lifting the rear portion of the vehicle, and therefore capable of pitching the bow downwardly about a transverse axis (see Examiner's response to Applicant's first argument).

Applicant's arguments: Applicant has stated that Claim 10 specifies automatically moving at least one trim tab, while GB '860 lacks any teaching or suggestion of independent movement of a side flap elements.

Response: Claim 10 does not require each trim tab to be "independently" moveable relative to the other trim tab, as being argued.

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ajay Vasudeva whose telephone number is (571) 272-6689. The examiner can normally be reached on Monday-Friday 12:00 – 5:30 pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, S. Joe Morano can be reached on (571) 272-6684. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Ajay Vasudeval/
Primary Examiner
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